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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,896	02/18/2004	Manfred R. Kuehnle	3483.1008-001	9061

21005 7590 11/22/2005

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EXAMINER
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LE, HOA T

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/780,896

Applicant(s)

KUEHNLE ET AL.

Examiner

H. T. Le

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4,7,8,11,14-20 and 27-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,7,8,11,14-20 and 27-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### *Double Patenting*

2. Claims 1-4, 7, 8, 11, 14-20, and 27-31 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4, 7, 8, 15, 21-27, 34, and 36-39 of U. S. Patent No. 10/780,901. Although the conflicting claims are not identical, they are not patentably distinct from each other for the following reason. The examined claims and the conflicting claims are substantially identical except that the independent claims of the present application name specific metal nitrides as the core material while the conflicting claims identify the material by its properties. The specific conductive metal nitrides as core material in the present claims intrinsically possess negative real part dielectric constant. Therefore, it would have been obvious to recognize that these specific metal nitrides are suitable as the core material suggested in the claims of the conflicting application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Applicants argued that “the amended claims are directed to the subject matter distinguishable by the composition of the particles”; therefore, the double patenting rejection is no longer appropriate. As stated above, all the metal nitrides as core materials as recited in the instant claims are “conductive material” and possess “negative real part

dielectric constant". Therefore, the double patenting rejection still applies and thus is maintained.

***Claim Rejections - 35 USC § 102***

3. Claims 1-3, 7, 8, 11, 14-20, 27, and 29-31 are rejected under 35 U.S.C. 102(b) as being anticipated by the Walther patent (US 5,570,249).

Claim 1: The Walther patent teaches a coated particle comprising a conducting core and a conductive shell (col. 4, lines 24-42 and 56-60 and col. 6, lines 62-67). The core comprises a metal or metal alloy (col. 5, lines 14-22), and metal (or metallic material that behaves like metal) intrinsically possesses negative real part dielectric constant. The shell comprises metal nitrides including titanium nitride and zirconium nitride (col. 7, lines 41-43). The core material and shell material as exemplified in examples have different refractive index from each other.

Claims 2, 8 and 11: Considered met by inference as the coated particle taught in the Walther patent comprises the same materials as the claimed core-shell particle.

Claim 3: See col. 4, lines 24-26 and col. 5, lines 40-42.

Claim 7: See col. 5, lines 14-17.

Claims 14-16: See rejections to claims 1-3, 7, 8 and 11 above.

Claims 17, 19 and 29: Col. 13, lines 50-55.

Claims 18 & 27: Col. 14, lines 8-25.

Claim 20: Col. 12, lines 66-67. Gasket, caulk, adhesive and coating are paint, gel, film and solid.

Claims 29-30: See col. 4, lines 24-26 and col. 5, lines 40-42.

Claim 31: col. 5, lines 14-22.

4. References not relied upon are cited as art of interest.

### *Conclusion*


5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. In addition, Applicant's arguments regarding the double patenting rejection are not persuasive as discussed in section 2 above. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to H. T. Le whose telephone number is 571-272-1511. The examiner can normally be reached on 10:00 a.m. to 6:30 p.m., Mondays to Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**H. Thi Le**  
**Primary Examiner**  
**Art Unit 1773**